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23908 7590 03/27/2008 RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115				
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HANS MEESEN

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Appeal 2008-0553  
Application 10/780,113  
Technology Center 3700

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Decided: March 27, 2008

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Before WILLIAM F. PATE, III, MURRIEL E. CRAWFORD, and  
HUBERT C. LORIN, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL  
STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 (2002) from a final rejection of claims 1 to 14. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

Appellant invented dunnage converters that convert multi-ply sheet stock material into a dunnage product (Specification 1).

Claim 1 under appeal reads as follows:

1. A dunnage conversion system for converting multiple plies of sheet material into a relatively less dense, three-dimensional dunnage product, the system comprising: a converter including a conversion assembly that is driven by a motor to advance multiple plies of sheet material through the converter for conversion of the multiple plies of sheet material into a relatively less dense, three-dimensional dunnage product, where the multiple plies of sheet stock material are fed to the conversion assembly along respective infeed paths; a controller that controls operation of the motor; and an end-of-web detector located upstream of the conversion assembly, the end-of-web detector including plural sensors respectively associated with the separate infeed paths for detecting the presence or absence of the respective ply and providing an output to the controller indicative thereof.

The Examiner rejected claims 1 to 4, 7, 8, and 12 to 14 under 35 U.S.C. § 103(a) as being unpatentable over Simmons in view of Kopp.

The Examiner rejected claims 5, 6, and 9 to 11 under 35 U.S.C. § 103(a) as being unpatentable over Simmons in view of Kopp and Harding.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Kopp	US 5,356,363	Oct. 18, 1994
Simmons	US 5,749,821	May 12, 1998
Harding	US 6,756,096 B2	Jun. 29, 2004

Appellant contends that (1) there is no motivation for combining the teachings of Simmons and Kopp because neither reference recognizes the problem solved by the Appellant's invention and (2) neither Simmons nor Kopp discloses providing a sensor for each ply fed to the same conversion assembly.

Appellant also contends that the Examiner erred in determining that it would have been obvious to modify the Simmons device so that operation of the conversion assembly is ceased in response to any one of a plurality of sensors detecting the end of a ply.

### ISSUES

The first issue is whether the Appellant has shown that the Examiner erred in holding that there is a reason to combine the teachings of Simmons and Kopp.

The second issue is whether the Appellant has shown that the Examiner erred in determining that it would have been obvious to provide a sensor for each ply fed to one conversion assembly in view of the combined teachings of Simmons and Kopp.

The third issue is whether the Appellant has shown that the Examiner erred in determining that it would have been obvious to modify the Simmons device so that operation of the conversion assembly is ceased in response to any one of a plurality of sensors detecting the end of a ply.

### FINDINGS OF FACT

Appellant discloses that it has been known for a long time that operators of converters that use multi-ply paper have encountered a problem in that the ends of the individual plies of a spent roll do not always align with one another (Specification 2). This non-alignment resulted in some of the plies being shorter than others so that the sensor detected the end of the paper only after the longest ply had passed the detector (Specification 2). As a result, an operator would have to remove the remainder of the paper from

the spent roll and thread the leading end of the paper from the new roll through the machine which is a more difficult and time-consuming process than simple splicing the leading end of a new roll to the trailing end of a spent roll (Specification 2 to 3).

Simmons discloses a dunnage conversion system wherein multiple ply stock is fed from a stock supply roll 98 to a conversion or forming assembly (col. 6, ll. 2 to 9). A sensor 118 is positioned at a location between the stock supply roll 98 and the forming or conversion assembly 26 to detect the end of the stock material (col. 6, ll. 29 to 34). The signal from sensor 118 is used by a controller to discontinue the operation of a feed motor 36 when the end of the stock material is detected (col. 6, ll. 48 to 52). The stock material is separated into individual piles 106, 108, 110 prior to being formed into a pad (col. 6, ll. 2 to 9).

Kopp discloses an apparatus for making flat packaging bags from sheet material that includes plural sensors 7, 67 to detect the end of the sheet associated with separate feed paths (col. 2, ll. 8 to 11; col. 3, ll. 20 to 24).

## ANALYSIS

We are not persuaded by the arguments of Appellant that there is no motivation to combine the teachings of Simmons and Kopp. The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents. The diversity of inventive pursuits and of modern technology counsels against limiting the analysis in this way. In many fields it may be that there is little discussion of obvious techniques or combinations, and it often may

be the case that market demand, rather than scientific literature, will drive design trends. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007).

In this instant case, as explained in Appellant's Specification, there was a well known problem associated with one sensor detecting the end of a multiple ply web which led to the necessity of an operator removing the stock roll and threading the new stock material through the machine. This operation by the operator is a much more difficult and time-consuming process than simply splicing the leading end of a new roll to the trailing end of a spent roll and results in increased complexity and costs. As such, there was a market demand to solve this problem and this market demand provides sufficient reason for a person of ordinary skill in the art to combine the teachings of Simmons and Kopp.

We are likewise not persuaded by Appellant's argument that it would not have been obvious to provide a sensor for each ply of several plies fed to one conversion assembly in view of the combined teachings of Simmons and Kopp. Appellant argues that Simmons does not disclose the separate sensors and that Kopp discloses three separate webs fed along parallel paths to their own respective bag-making assemblies. However, Kopp does disclose the use of separate sensors for each feed path. When this teaching of separate sensors for each feed path is utilized in the Simmons device it results in the predictable result that the end of each ply is separately detected. We note that this combination of familiar elements according to known methods yields no more than predictable results. *KSR*, 127 S.Ct. at 1739.

In view of the foregoing, we will sustain the rejection of claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Simmons in view of Kopp.

We will also sustain the rejection of claims 2, 3, 7, 12, and 14 because the Appellant has not argued the separate patentability of these claims.

We will also sustain this rejection as it is directed to claim 8. We are not persuaded by Appellant's argument that neither Simmons nor Kopp discloses ceasing operation of a motor in response to a signal from any one of a plural of sensors. Simmons teaches that the signal from the sensor 118 is used by the controller to stop the operation of the feed motor. As such, a person seeking to prevent the problems associated with one sensor detecting the end of a multiple ply web based on one ply would certainly include the feature of stopping the motor when the end of any ply is sensed.

In view of the foregoing, we will sustain the rejection of claims 1 to 4, 7, 8 and 12 to 14 under 35 U.S.C. § 103 as being unpatentable over Simmons in view of Kopp.

We will also sustain the Examiner's rejection of claims 5, 6, and 9 to 11 under 35 U.S.C. § 103 as being unpatentable over Simmons in view of Kopp and Harding because Appellant does not advance separate arguments in response to this rejection.

Appeal 2008-0553  
Application 10/780,113

The decision of the Examiner is AFFIRMED.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

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